

ABSTRACT

The present invention relates to carcinogenesis biomarkers produced by phenobarbital-treated rat hepatocytes, nucleic acid molecules that encode carcinogenesis biomarkers or a fragment thereof and nucleic acid molecules that are useful as probes or primers for detecting or inducing carcinogenesis, respectively. The invention also relates to applications of the factor or fragment such as forming antibodies capable of binding the carcinogenesis biomarkers or fragments thereof.